



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,291	12/28/2001	Yusuke Nakazono	35.G2971	3111
5514	7590	08/23/2005		EXAMINER
				RUDOLPH, VINCENT M
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/029,291	NAKAZONO ET AL.
	Examiner	Art Unit
	Vincent Rudolph	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 December 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 December 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/31/02, 11/26/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the "system bus 304" and the "system bus 305" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The computer program claimed is merely a set of instructions per se. Since the computer program is merely a set of instructions not embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory. See MPEP § 2106 IV.B.1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 8-14, 20-26, and 32-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Iizuka ('385).

Regarding claim 1, Iizuka ('385) discloses an information processing apparatus, or a web server (See Figure 1, Element 13), for distributing software for image forming apparatus control use (See Col. 16, Line 4-8) over a network (See Figure 1; Col. 15, Line 5-12). It also has a receiving means by a data base server (See Figure 1, Element 11) for receiving data from the network dealing with the consumable-unit information

such as replenishing an amount of processing solution, an amount of processing gents to be supplied, etc. (See Col. 18, Line 27-35), which is detachably loaded into the image forming apparatus. An application server (See Figure 1, Element 12) stores the image formation control software and distributes it for printing apparatus depending on the consumable-unit information through the web server (See Col. 16, Line 6-8).

Regarding claim 2, Iizuka ('385) discloses the information processing apparatus, or a web server (See Figure 1, Element 13), contains an application server (See Figure 1, Element 12), which is able to store plural kinds of software for the image forming apparatus (See Col. 15, Line 53-62) based on the consumable-unit information received about the image forming apparatus (See Col. 18, Line 41-44) from the receiving means of the data base server (See Figure 1; Col. 15, Line 36-41). The information processing apparatus also has a deciding means in which the application server also retrieves the predetermined consumable-unit information from the data base server (See Col. 15, Line 60-62) and then decides the appropriate image formation control software, which is then distributed to the external equipment via the network (See Figure 1; Col. 16, Line 6-8).

Regarding claim 8, Iizuka ('385) discloses an information processing apparatus, or a web server (See Figure 1, Element 13), which includes a data base server (See Figure 1, Element 11) to receive information for identifying the image forming apparatus (See Col. 15, Line 36-38). An application server (See Figure 1, Element 12) within the information processing apparatus then decides the predetermined image formation control software depending on the identifying information, such as serial numbers,

software version, etc. (See Col. 25, Line 31-35) and the consumable-unit information for specifying a type of consumable-unit (See Col. 18, Line 27-35).

Regarding claim 9, Iizuka ('385) discloses within an image processing apparatus, or a web server (See Figure 1, Element 13), a data base server (See Figure 1, Element 11) transmits consumable-unit information such as replenishing an amount of processing solution, an amount of processing gents to be supplied, etc. (See Col. 18, Line 27-35), which is detachably loaded into the image forming apparatus, to the image-formation control software distribution server, or an application server according to Iizuka ('385) (See Col. 15, Line 60-62), via the network (See Figure 1, Col. 15, Line 5-12). The image forming apparatus also receives via the network the image formation control software, which was decided and transmitted from the distribution, or application, server (See Col. 16, Line 8-11) based on the consumable-unit information (See Col. 18, Line 27-35).

Regarding claim 10, Iizuka ('385) discloses within an information processing apparatus, or a web server (See Figure 1, Element 13), the consumable-unit information (See Col. 18, Line 27-35), as well as other image forming apparatus data is recognized and stored within the data base server (See Col. 16, Line 35-40). A determining means for whether the consumable-unit information recognized is changed from the data already stored, and if so, the information is confirmed and updated (See Col. 26, Line 12-27). Then a control means is processed when the consumable-unit, or equipment, change is made so the image formation control software version can be changed after the equipment change is confirmed (See Col. 26, Line 21-23). If no problem arises

when it was determined it was changed, the software is then updated once a prompt displaying a license agreement is displayed and confirmed (See Col. 26, Line 18-10).

Regarding claim 11, Iizuka ('385) discloses an information processing apparatus, or a web server (See Figure 1, Element 13), with a setting control for executing the image control software installation that judges whether the software updating is needed or not, and if so, the updating software is executed (See Col. 25, Line 47-51). An image forming apparatus (See Figure 2) also executes print, or image, processing means that when exposed onto a predetermined recording medium, such as paper, the image data forms (See Figure 3; Col. 20, Line 66-Col. 21, Line 2). Also, if the layout determining means (See Figure 3, Element 172), located with the control section, receives the recorded image data, then the print processing was correctly executed (See Col. 20, Line 66-Col. 21, Line 6).

Regarding claim 12, Iizuka ('385) discloses an image-formation control software distributing system (See Figure 1) that is made up of two information processing apparatuses, one for distributing image formation control software via the network, such as the web server disclosed by Iizuka ('385) (Figure 1, Element 13), and the other capable of executing communication with the first server, such as the data base server (See Figure 1, Element 11). This system is able to receive data dealing with consumable-unit information such as replenishing an amount of processing solution, an amount of processing gents to be supplied, etc. (See Col. 18, Line 27-35), which is detachably loaded into the image forming apparatus from the second information processing apparatus through a network (See Figure 1; Col. 15, Line 36-38). The

Art Unit: 2624

image forming apparatus data is received via the network (See Col. 16, Line 4-8), and the image formation control software is distributed depending on the consumable-unit information (See Col. 18, Line 41-44) to the first information processing apparatus from an application server (See Figure 1, Element 12), which stores the software (See Col. 15, Line 53-56).

Regarding claims 13, 14, 20-26 and 32-36, the rationale provided in rejection of claims 1, 2, and 8-12 is incorporated herein respectively. In addition, the apparatus of claims 1, 2, and 8-12 corresponds to the method and program of claims 13, 14, 20-26 and 32-36 and performs the steps disclosed, respectively.

Regarding claim 37-39, the rationale provided in rejection of claims 1, 9 and 12 is incorporated herein respectively. In addition, the apparatus of claims 1, 9 and 12 corresponds to the storage medium of claims 37-39 and performs the steps disclosed, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-7, 15-19 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iizuka ('385) in view of Kobayashi ('238).

Regarding claim 3, Iizuka ('385) discloses the information processing apparatus, or a web server (See Figure 1, Element 13), includes an application server (See Figure 1, Element 12) to store the optimum image formation control software (See Col. 15, Line 53-56), which corresponds to the statistical information, such as the consumable-unit data (See Col. 18, Line 27-35) of the image forming apparatus. A deciding means by which the application server retrieves the predetermined image from the data base server and then decides the appropriate image formation control software based on the consumable-unit information (See Col. 18, Line 41-44) from the data base server (See Col. 15, 60-62), which then distributes the software decided upon to the image forming apparatus via the network (See Figure 1; Col. 16, Line 6-8).

Iizuka ('385) fails to fully disclose a production lot number included within the consumable-unit information.

Kobayashi ('238) discloses a production lot number, or an identification number or code such as the manufacturer's serial number, which is associated with consumables collected in a storage area (See Figure 1; Col. 2, Line 18-24). This is used to detect whether the consumable is new or used, and the number of times it has been used according to the updated life count (See Col. 2, Line 27-39).

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have the consumable identification number information disclosed by Kobayashi ('238) and incorporate it into the consumable-unit data of the information processing apparatus of Iizuka ('385) because by including this information, the information processing apparatus can then properly access the consumable-unit

information, retrieve it and other printer information and apply the proper image formation control software to the image forming apparatus.

Thus, claim 3 is properly rejected under 35 U.S.C. 103(a).

Regarding claim 4, Iizuka ('385) discloses the information processing apparatus, or a web server (See Figure 1, Element 13), contains an application server (See Figure 1, Element 12), which stores optimum image formation control software (See Col. 15, Line 53-56) corresponding to the combination, or plurality, of production lots that are a part of the consumable-unit information (See Col. 18, Lines 27-35). The application server retrieves the information from the data base server and then decides the appropriate image formation control software based on the consumable-unit information (See Col. 18, Line 41-44) from the data base server (See Col. 15, Line 60-62), which then distributes the software decided upon to the image forming apparatus via the network (See Figure 1; Col. 16, Line 6-8).

Regarding claim 5, Iizuka ('385) discloses the information processing apparatus, or a web server (See Figure 1, Element 13), which has a data base server (See Figure 1, Element 12) to collect and store the operating information from the image forming apparatus (See Col. 15, Line 36-38). The application server (See Figure 1, Element 12) then selects the appropriate software for the image forming apparatus based on the information received corresponding to the data base information, such as serial numbers, software version, etc. (See Col. 25, Line 27-41). The information processing apparatus then distributes the appropriate image formation control software from the

application server via the network once the information of the printing apparatus is sent and stored in the data base server (See Col. 16, Line 4-8).

Iizuka ('385) does not disclose that the information regarding the image forming apparatus includes the production lot number to determine the image formation control software.

Kobayashi ('238) discloses a production lot number, or an identification number or code, which is associated with consumables collected in a storage area (See Figure 1; Col. 2, Line 18-24). This is used to detect whether the consumable is new or used, and the number of times it has been used according to the updated life count (See Col. 2, Line 27-39).

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have the consumable identification number information disclosed by Kobayashi ('238) and incorporate it into the data received by the information processing apparatus of Iizuka ('385) because by having this information, the information processing apparatus can retrieve that and the other printer information and apply the proper image formation control software corresponding to the image forming apparatus.

Thus, claim 5 is rejected under 35 U.S.C. 103(a).

Regarding claim 6, Iizuka ('385) discloses an information processing apparatus, or a web server (See Figure 1, Element 13), which distributes software for image forming apparatus control use from a network (See Figure 1; Col. 16, Line 8-11).

Iizuka ('385) does not specifically say what is included in the consumable unit inside the image forming apparatus.

Kobayashi ('238) discloses a photoconductor, or a photosensitive drum (See Figure 1), which is a type of consumable used in an image forming apparatus to output data (See Col. 1, Line 54-55).

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have a consumable, such as a photosensitive drum, disclosed by Kobayashi ('238) and incorporate it into the image forming apparatus mentioned by Iizuka ('385) because it is one such consumable that can be used within an image forming apparatus to output data.

Thus, claim 6 is rejected under 35 U.S.C. 103(a).

Regarding claim 7, Iizuka ('385) discloses the information processing apparatus, or a web server (See Figure 1, Element 13), which includes a data base server (See Figure 1, Element 11) to recognize the consumable-unit information from the image forming apparatus (See Col. 15, Line 36-38).

Iizuka ('385) does not specifically say a photoconductor is a consumable unit inside the image forming apparatus and the production lot number is the consumable-unit information of the photoconductor.

Kobayashi ('385) discloses a photoconductor, or a photosensitive drum (See Figure 1), which is a type of consumable used in an image forming apparatus to output data (See Col. 1, Line 54-55). The photosensitive drum also has an identification

Art Unit: 2624

number or code, such as the manufacturer's serial number, which is associated with consumables collected in a storage area (See Figure 1; Col. 2, Line 18-24).

It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have a consumable-unit such as the photosensitive drum disclosed by Kobayashi ('238), which contains the production lot number and incorporate it into the saved information of the information processing apparatus mentioned by Iizuka ('385) because by having the production lot number of the consumable-unit as part of the printer information, that data can be recognized by the information processing apparatus can then apply the proper image formation control software to the image forming apparatus.

Iizuka ('385) also does not explicitly state that there is software used to control a light amount irradiated to the photoconductor. He does provide information regarding the data base server receiving statistical information obtained from the image forming apparatus, storing it (See Col. 16, Line 35-40), and applying software for controlling the image forming apparatus, such as the temperature of a processing solution (See Col. 18, Line 27-30). By obtaining various types of information from the image forming apparatus, software modification can be applied, corrected or updated to control a certain aspect of the image forming apparatus (See Col. 18, Line 57-64). Iizuka ('385) discloses one such instance the data base server receives, which is an accumulated operation time of a film scanner lamp and is calculated and sent to the data base server. The daily lighting time is stored in the data base server so the life usage of the lamp can be calculated. A replacement can be issued prior to the lamp burning out then

(See Col. 17, Line 41-51). Thus, the examiner concludes that software can be issued to control a light amount to the photoconductor based on the information sent from the image forming apparatus, which can be used to estimate or prolong the life of the lamp.

Thus, claim 7 is rejected under 35 U.S.C. 103(a).

Regarding claims 15-19 and 27-31, the rationale provided in rejection of claims 3-7 is incorporated herein respectively. In addition, the apparatus of claims 3-7 corresponds to the method and program of claims 15-19 and 27-31 and performs the steps disclosed, respectively.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is: Garr ('420) and Sugiyama ('129).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Rudolph whose telephone number is (571) 272-8243. The examiner can normally be reached on Monday through Friday 8 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Rudolph
Examiner
Art Unit 2624



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600